Clmpto

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1. Method to synchronize at least a user equipment to at least one base transceiver station belonging to a digital telecommunication network, in which radio signals transmitted and received by said base station are subdivided into frames (Fn) having predefined duration and each frame is subdivided into a predefined number of timeslots (Tn) and codes (Cn), said signals including at least a synchronization signal (S), which is transmitted by the base transceiver station and contains a modulation elementary units sequence suitable to identify the timeslot (T1) and the code (C1) of a service channel containing a system messages (M), characterized in that it includes the following operational steps:

   - marking the synchronization signal (S), in at least one frame (Fx), by the base transceiver station;
   - transmitting a pointer message (P) in the service channel of such frame (Fx), or of a subsequent frame (Fx+n), by the base transceiver station;
   - detecting the marked synchronization signal (S') by the mobile unit;
   - receiving the pointer message (P) by the mobile unit;
   - extracting from the pointer message (P) the position of at least a system message (M') by the mobile unit.

2. (Amended) Method according to claim 1, characterized in that the marking of the synchronization signal (S) by the base transceiver station includes at least a polarity inversion of the relative modulation elementary units.

3. (Amended) Method according to claim 2, characterized in that the marking of the synchronization signal (S) by the base transceiver station includes two polarity inversions of the relative modulation elementary units in two consecutive frames (Fx, Fx+1).

4. (Amended) Method according to any of claims 1 to 3, characterized in that the extraction from the pointer message (P) of the position of at least a system message (M') includes the decoding of the frame number of such system message (M').

5. (Amended) Method according to claim 4, characterized in that the extraction from the pointer message (P) of the position of at least a system message (M') includes the decoding of the multiframe number of such system message (M').

6. (Amended) Method according to any of claims 1 to 3, characterized in that the marking of the synchronization signal (S) by the base transceiver station takes place with periodicity multiple of its own multiframe period.

7. System to synchronize at lease one user equipment to at least one base transceiver station belonging to a digital telecommunication network, in which radio signals transmitted and received from said base station are divided into frames (Fn) having predefined duration and each frame is subdivided in a predefined number of timeslots (Tn) and codes (Cn), said signals including at least a synchronization signal (S) which is transmitted by the base transceiver station and includes a sequence of modulation elementary units suitable to identify the timeslot (TI) and the code (CI) of a service channel containing system messages (M), characterized in that it includes at least a base transceiver station with means adapted:

- to mark the synchronization signal (S) in at least one frame (Fx), and
- to transmit a pointer message (P) in the service channel of this frame (Fx) or of a subsequent frame (Fx+n).

8. (Amended) System according to claim 7, characterized in that it includes at least a user equipment with means adapted:

to detect the marked synchronization signal (S') from said base transceiver station;

to receive the pointer message (P) transmitted by said base transceiver station, and

to extract from the pointer message (P) the position of at least a system message (M').

9. System according to claim 7 or 8, characterized in that it includes an additional base transceiver station adapted to detect the marked synchronization signal (S'), and synchronize in multiframe with said first base transceiver station through such marked synchronization signal (S').

10. (Amended) System according to claim 7, characterized in that it is adapted to implement the method according to claim 1.